
वस्त्रादि — सादे केलिको करघे के लिए
स्प्रिंग्स — विशिष्टि

(पहला पुनरीक्षण)

Textiles — Springs for Plain Calico
Looms — Specification

(First Revision)

ICS 59.120.30

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FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Textile Machinery and Accessories Sectional Committee had been approved by the Textiles Division Council.

This standard was originally published in 1976. The standard has been revised to incorporate the following changes:

- a) References to Indian Standards have been updated;
- b) Packing clause has been incorporated; and
- c) Marking clause has been modified.

The composition of the Committee responsible for the formulation of this standard is given in Annex B.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

*Indian Standard***TEXTILES — SPRINGS FOR PLAIN CALICO
LOOMS — SPECIFICATION***(First Revision)***1 SCOPE**

This standard prescribes the requirements for the following plain calico loom springs:

- a) Swell spring;
- b) Back spring;
- c) Bow spring; and
- d) Box-end spring.

2 REFERENCES

The standards listed in Annex A contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to

investigate the possibility of applying the most recent edition of these standards.

3 MATERIAL

Springs shall be made of cold rolled spring steel conforming to Grade 4 of IS 2507.

4 REQUIREMENTS**4.1 Dimensions**

Dimensions of springs shall be as agreed to between the buyer and the seller according to the make of loom subject to the tolerances specified in IS 2102 (Part 1) in respect of width and length and IS 2507 in respect of thickness. Typical springs are shown in Fig. 1 to Fig. 4.

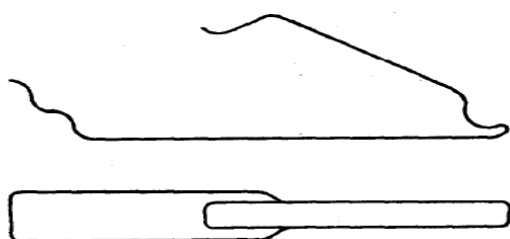


FIG. 1 SWELL SPRING



FIG. 2 BACK SPRING

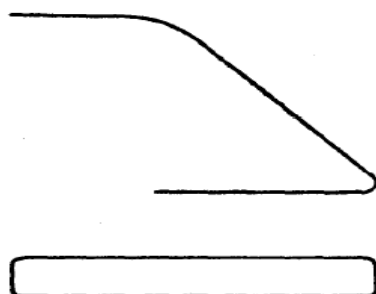


FIG. 3 BOW SPRING

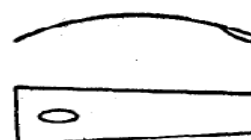


FIG. 4 BOX-END SPRING

4.2 Hardness

The hardness as measured on Rockwell C scale according to the method prescribed IS 1586 (Part 1) shall be 36 HRC to 43 HRC.

- c) Lot/batch number;
- d) Country of origin; and
- e) Any other information required by the law in force and/or by the buyer.

5 SAMPLING

Unless otherwise agreed to between the buyer and the seller, for inspection of dimensions and hardness, the single sampling plan with Inspection Level I and Acceptable Quality Level (AQL) of 2.5 percent given in Table 1 and Table 2 of IS 2500 (Part 1) shall be followed.

6.2 BIS Certification Marking

The spring(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

6 MARKING

6.1 Each spring shall be marked with the following:

- a) Manufacturer's name or trade-mark;
- b) Name and dimensions of spring;

7 PACKING

Springs shall be suitably packed as may be agreed to between the concerned parties. The package should contain fixed number of springs essentially of the same variety.

ANNEX A

(Clause 2)

LIST OF REFERRED STANDARDS

<i>IS No.</i>	<i>Title</i>	<i>IS No.</i>	<i>Title</i>
IS 1586 (Part 1) : 2018/ISO 6508-1 : 2016	Metallic materials — Rockwell hardness test: Part 1 Test method (<i>fifth</i> <i>revision</i>)	IS 2500 (Part 1) : 2000/ISO 2859-1 : 1999	Sampling procedures for inspection by attributes: Part 1 Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection (<i>third</i> <i>revision</i>)
IS 2102 (Part 1) : 1993/ISO 2768-1 : 1989	General tolerances: Part 1 Tolerances for linear and angular dimensions without individual tolerance indications (<i>third</i> <i>revision</i>)	IS 2507 : 1975	Specification for cold- rolled steel strips for springs (<i>first revision</i>)

ANNEX B*(Foreword)***COMMITTEE COMPOSITION**

Textile Machinery and Accessories Sectional Committee, TXD 14

<i>Organization</i>	<i>Representative(s)</i>
Central Manufacturing Technology Institute, Bengaluru	DR NAGAHANUMAIAN (Chairperson)
Amritlakshmi Machine Works, Mumbai	SHRI N. K. BRAHMACHARI SHRI N. K. RAUT (<i>Alternate</i>)
ATE Enterprises Private Limited, New Delhi	SHRI ABHIJIT KULKARNI SHRI ANIL KUMAR SHARMA (<i>Alternate</i>)
Bajaj Industries Private Limited, Kolkata	REPRESENTATIVE
Bhowmick Calculator, Kolkata	SHRI GOUTAM BHOWMICK SHRI VIVEKANANDA BHOWMICK (<i>Alternate</i>)
Central Manufacturing Technology Institute, Bengaluru	SHRI B. R. MOHANRAJ SHRI K. SARAVANAN (<i>Alternate</i>)
Confederation of Indian Textile Industry, New Delhi	SHRI AJAY KUMAR
Dashmesh Jacquard and Powerloom Private Limited, Panipat	SHRI RAJMEET DHAMMU (<i>Representative</i>)
HLL Lifecare Limited, Noida	SHRI AKHIL G. S. SHRI RATNAKAR GUPTA (<i>Alternate</i>)
ICAR-Central Institute for Research on Cotton Technology, Mumbai	DR N. SHANMUGAM DR T. SENTHILKUMAR (<i>Alternate</i>)
India ITME Society, Mumbai	SHRI PRASHANT MANGUKIA SHRIMATI SEEMA SRIVASTAVA (<i>Alternate</i>)
Indian Jute Industries Research Association, Kolkata	SHRIMATI SAUMITA CHOUDHURY SHRI PARTHA SANYAL (<i>Alternate</i>)
Indian Jute Mills Association, Kolkata	REPRESENTATIVE
Indian Textile Accessories and Machinery Manufacturers Association, Mumbai	SHRI N. D. MHATRE SHRI CHANDRESH SHAH (<i>Alternate</i>)
Inspiron Engineering Private Limited, Ahmedabad	SHRI SANJAY KOWARKAR SHRI ANKUR SONI (<i>Alternate</i>)
JCB Industries, Guwahati	SHRI DHRUBA SARMA SHRI ABHIJIT BHUYAN (<i>Alternate</i>)
Kusters Calico Machinery Limited, Karjan	SHRI DEVANG PARIKH SHRI SHUBHASIS SUR (<i>Alternate</i>)
Lakshmi Machine Works Limited, Coimbatore	MS KALPANA A. MS DIVYA V. (<i>Alternate</i>)
Laxmi Shuttleless Looms Private Limited, Ahmedabad	SHRI KETAN SANGHVI
Ludlow Jute Limited, Kolkata	REPRESENTATIVE

<i>Organization</i>	<i>Representative(s)</i>
Ministry of Heavy Industries and Public Enterprises, Department of Heavy Industry, New Delhi	SHRI SANJEEV GUPTA SHRI S. SUNDAR (<i>Alternate</i>)
National Safety Council, Navi Mumbai	SHRI LALIT R. GABHANE SHRI R. R. DEOGHARE (<i>Alternate</i>)
Office of the Textile Commissioner, Mumbai	SHRI C. R. KALESAN SHRI JAGRAM MEENA (<i>Alternate</i>)
Peass Industrial Engineers Private Limited, Navari	SHRI RAVI S. RAO SHRI JIGNESH B. PATEL (<i>Alternate</i>)
Technocraft Industries India Limited, Mumbai	SHRI RAVINDER KUMAR SHRI DURADUNDESHWAR HIREMATH (<i>Alternate</i>)
Textile Machinery Manufacturers Association, Mumbai	SHRI M. SHANKAR SHRI PRASHANT MANGUKIA (<i>Alternate</i>)
The Bombay Textile Research Association, Mumbai	SHRI VIJAY GAWDE SHRI R. A. SHAIKH (<i>Alternate</i>)
The Synthetic and Art Silk Mills Research Association, Mumbai	DR MANISHA MATHUR SHRI SANJAY SAINI (<i>Alternate</i>)
The Textile Association (India), Mumbai	SHRI J. B. SOMA SHRI ASHOK JUNEJA (<i>Alternate</i>)
Truetzschler India Private Limited, Ahmedabad	SHRI PRAVIN KANDGE SHRI SHILADITYA JOSHI (<i>Alternate</i>)
United Nations International Children's Emergency Fund, New Delhi	DR PRATIBHA SINGH SHRI YUSUF KABIR (<i>Alternate</i>)
Veermata Jijabai Technological Institute, Mumbai	DR SURANJANA GANGOPADHYAY SHRI S. P. BORKAR (<i>Alternate</i>)
BIS Directorate General	SHRI J. K. GUPTA, SCIENTIST 'E'/DIRECTOR AND HEAD (TEXTILES) [REPRESENTING DIRECTOR GENERAL (<i>Ex-officio</i>)]

Member Secretary
SHRI SWAPNIL
SCIENTIST 'B'/ASSISTANT DIRECTOR
(TEXTILES), BIS

Bureau of Indian Standards

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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